What is claimed is:

CLAIMS

1. A semiconductor-based device processing apparatus comprising:

a chuck for supporting a wafer; and

a barrier having a first position relative to the wafer wherein the first position relative to the wafer substantially facilitates etch uniformity for a chemically driven etch process, and having a second position relative to the wafer wherein the second position relative to the wafer does not interfere with the etch uniformity of an ion driven etch process.

2. The apparatus as recited in claim 1 wherein the barrier is moved to establish the first and the second position of the barrier relative to the wafer.

3. The apparatus as recited in claim 2 wherein the first position is substantially above the wafer and the second position is substantially below the wafer.

4. The apparatus as recited in claim 1 wherein the chuck is moved to establish the first and the second position of the barrier relative to the wafer.

5. The apparatus as recited in claim 1 wherein the barrier surrounds the periphery of the wafer.

6. The apparatus as recited in claim 1 wherein the barrier is moved between the first and the second position using an actuator.

7. The apparatus as recited in claim 1 wherein the barrier has a third position.

8. A plasma processing apparatus comprising:

a chuck for supporting a wafer; and

a moveable barrier having a first position and a second position, wherein the first position is capable of restricting diffusion of gases over the wafer within the plasma processing apparatus to the wafer.

9. The apparatus as recited in claim 8 wherein the plasma processing apparatus further comprises an actuator operable to move the moveable barrier between the first position and the second position.

10. The apparatus as recited in claim 7 wherein at least a portion of the moveable barrier is within 1/8 inches to 2 inches of the wafer when in the first position.

11. The apparatus as recited in claim 8 wherein the moveable barrier includes an opening.

12. The apparatus as recited in claim 8 wherein the moveable barrier shape is relative to the shape of the wafer.

13. The apparatus as recited in claim 12 wherein the moveable barrier shape is substantially circular.

14. A method for performing a multi-step etch within a semiconductor-based device processing apparatus, the semiconductor-based device processing apparatus including a barrier having a first position relative to a wafer facilitative of a first etch process and having a second position relative to the wafer facilitative of a second etch process, the method comprising:

performing a first etch process with the barrier in the first position relative to the wafer;

changing the position of the barrier relative to the wafer from the first position relative to the wafer to the second position relative to the wafer; and

performing a second etch process with the barrier in the second position relative to the wafer.

15. A method as recited in claim 14 wherein changing the position of the barrier relative to the wafer is performed by moving the barrier.

16. A method as recited in claim 14 wherein the first etch process is a chemically driven etch.

17. A method as recited in claim 16 wherein the first etch process is a metal etch.

18. A method as recited in claim 16 wherein the second etch process is an ion assisted etch.

19. A method as recited in claim 14 wherein the first etch process is an ion assisted etch.

20. A method as recited in claim 19 wherein the second etch process is a chemically driven etch.

21. A method as recited in claim 14 further including a third etch.

22. A method as recited in claim 21 wherein the third etch occurs between the first and the second etch.

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